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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/838,340 | 04/20/2001 | Kanji Nakamura | Q64219 | 1059 |
| 7590 | 04/07/2004 | | EXAMINER | |
| SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037 | | | | NGUYEN, JIMMY T |
| | | ART UNIT | PAPER NUMBER | 3725 |

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/838,340 | NAKAMURA ET AL. |
| | Examiner | Art Unit |
| | Jimmy T Nguyen | 3725 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 9/30/03.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16, 18-34 and 36-41 is/are pending in the application.
 4a) Of the above claim(s) 34 and 36-41 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-16 and 18-33 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 20 April 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1.) Certified copies of the priority documents have been received.
 2.) Certified copies of the priority documents have been received in Application No. _____.
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed on September 30, 2003 under 37 CFR 1.131 has been carefully considered and an action on the merits follows.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 and 18-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1, Examiner suggests—wherein the method comprises the steps of--

With regard to claim 5, the claim is vague and indefinite. It is unclear what is meant by “the filtering and the compressing are performed....in a paralleling fashion.(line 3-4)” The parent claim clearly states, that filter the sludge provides a concentrated sludge and that the compression is then applied to the concentrated sludge. Clarification is required.

Additionally, regarding claim 5, lines 2 and 3, there is no antecedent basis for the terms, “plurality of kinds” and “the coolants” in the claim. The parent claim states, “an oil-based coolant” (implying only a single coolant). Further with regard to claim 5, it is not clear where “a grinding line” relates to the positively recited steps of the claim (i.e., is there a grinding step

preceding the filter step, following the filtering step or following the compression step). The steps of the method claim must be clearly and positively recited.

With regard to claim 7, the claim is more in the form of Abstract as opposed to a proper apparatus claim. For example, the claim fails to positively recite the critical interrelationships between the elements.

Regarding claims 8, 9,10, 13, 24, 26, 29, 30, 31, 32, the claims fail to positively recite the critical interrelationships between the elements. For example, it is unclear what structural interrelationship between the grinding line and the press unit(s). Further, it is unclear whether the elements recite in the preamble are part of the body of claims.

All of the claims should be reviewed for clarity.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by McEwen et al. (US 3,980014). McEwen discloses a method and an apparatus for making a compressed solid material by compressing sludge containing an oil-based coolant (col. 1, lines 10-15), the method and the apparatus comprising: a filter (22) for filtering the sludge to provide a concentrated sludge; a compressor (40) for compressing the concentrated sludge by squeezing to thereby provide the compressed solid material (briquette).

Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by (US 5,391,069).

Bendzick discloses an apparatus as claimed including a press unit (14), which compress metal shavings (sludge) containing oil (herein read as coolant); a press controller (184) applies the pressure to squeeze equal or lower than 400mPa (about 58,000 psi) (see col. 5, line 65 to col. 7, line 56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over**McEwen et al.**

Regarding claim 4, McEwen discloses the sludge is guided towards a filtering belt/screen (22), and is filter under pressure by utilization of a hydraulic pressure cylinder (42). McEwen does not disclose the sludge filtered under pressure by utilization of compressed air. However the specific selection of a compressed air pressure source is one of mechanical expedients (i.e. compressed air/pneumatic, fluid/hydraulic). It is well known in the mechanical arts that hydraulic and pneumatic pressure piston-cylinder assemblies are equivalents. The matter of selecting a compressed air/pneumatic cylinder over a hydraulic cylinder involves only routine skill in the art. Therefore, it would have been obvious at the time of the invention to one having ordinary skill in the art to replace McEwen's compressed fluid source/hydraulic cylinder with a

compressed air source. Such replacement would not create any unobvious, unexpected or usual result.

Regarding claim 6, McEwen discloses the hardened material except for the hardened material is component parts of a rolling bearing. However, the choice of selecting hardened material from component parts of a rolling bearing involves only routine skill in the art. Such specific selection is based on a material suitability for the intended use. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use hardened material from component parts of a rolling bearing or any hardened material. Such material would not create any unobvious, unexpected or usual result of the method claimed.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendzick (US 5,391,069).

Regarding claim 31, Bendzick discloses the invention substantially as claimed as set forth above. Bendzick discloses the press unit drives a pressing member (42) using a hydraulically operated piston (30). The press unit does not use a ball screw mechanism driven by an electric motor as claimed. However, it would have been an obvious matter of design choice to use a ball screw mechanism to drive the press member, since applicant has not disclosed that the use of ball screw mechanism solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the drive mechanism as disclosed by Bendzick.

Regarding claim 32, Bendzick discloses the invention substantially as claimed as set forth above. Bendzick discloses the sludge is from hardened component parts (i.e. metal), Bendzick does not disclose the component hardened component parts are ferrous component parts of a rolling bearing. However, the choice of selecting hardened material from component parts of a

rolling bearing involves only routine skill in the art. Such specific selection is based on a material suitability for the intended use. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use hardened material from component parts of a rolling bearing or any hardened material. Such material would not create any unobvious, unexpected or usual result.

Allowable Subject Matter

Based on the newly applied reference(s) and rejections noted above, the indication of allowable subject matter in the previous Office Action has been withdrawn.

Response to Arguments

Applicant's remarks have been carefully considered, however, based on the new rejections above, this Office Action is made non-final. Any inconvenience is duly noted.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,279,471 to Reddoch and US 4,557,190 to Vezzani.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Nguyen whose telephone number is (703) 305-5304. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on (703) 308-3136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTNguyen
April 01, 2004



ALLEN OSTRAGER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700